

To Fall or Not to Fall

Challenges to the DOE Paradigm for Fall Protection

for Construction Safety Advisory Committee, June 16, 2015
Bill Schleyer, NA-51

Fall Protection

- What is the DOE standard(s)?
- What are we implementing
- How much risk should DOE accept
- How much are we
- Future

Charter

- “highest levels of safety and regulatory performance”
- Advocate for strong performance
- Seek and Promote BMP
- Exchange Information, design studies, technical positions (white paper on horizontal fall)
- Effective Safety

Effective Safety

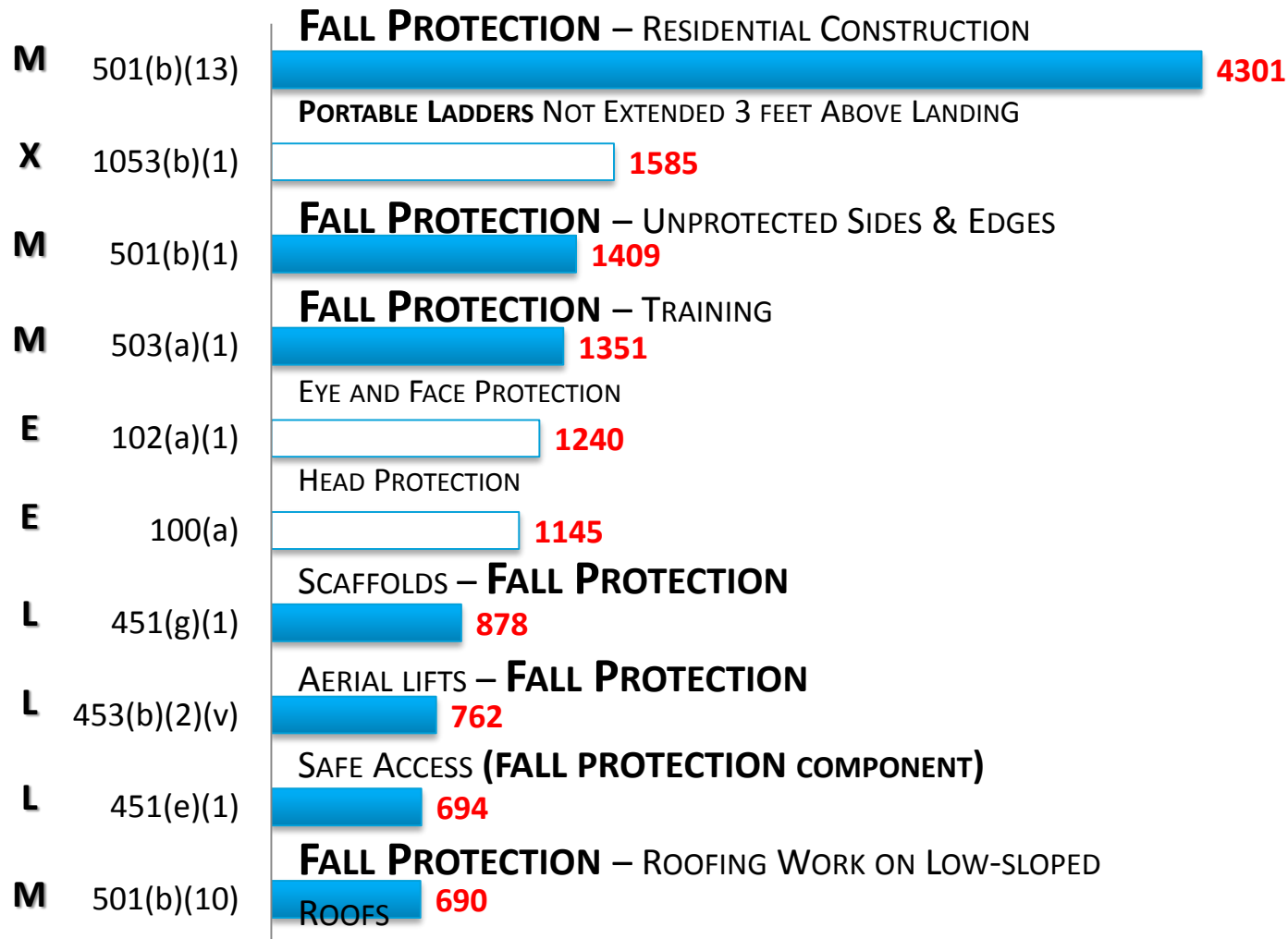
- Purpose of this discussion
 - Open discussion
 - Clarify current standards
 - Should we advocate
 - To what expectations

In AGREEMENT

- 22 million die each year in work related incidents and illness
- ~4000 work place deaths each year in United States
- Deaths at DOE hand full + Recent close calls
- SPO fall from Pantex roof avoidable
- Culture-- has pro/con impacts.

Most Frequently Cited Serious Violations in Construction 2014

29 CFR 1926 SUBPARTS



Leading Causes of Construction Fatalities

Cause	Fatalities 2011	Fatalities 2012	Fatalities 2013*
FALL TO LOWER LEVEL	255	281	284
STRUCK BY	73	79	82
ELECTROCUTION	69	66	71
CAUGHT IN/BETWEEN	18	13	21

Source: BLS Table A-9 for Each Year Shown

*2013 Numbers are preliminary



Hazard and Risk is Clear

What are

COMMON UNDERSTANDING OF DOE EXPECTATIONS

DISAGREE On

- Guardrails
- De Minimis
- 6ft, 15ft, how far?
- Protective factor of warning line
- Use of Admin controls
- How much is NOT enough//How much is?
- Ways to cause change (think Lead change)

What is DOE doing?

- Mish-Mash, shotgun, WIIFM, turf wars,
- Cover you _____
- Minimal guidance
- Next to no direction
- Struggling with 70-80 requirements
- Way behind in setting the standard requiring guardrails, 100% protection

What is the Private Sector doing?

- Recognizing safety meshed with production = profit
- Sharing between companies
- NO squabbling-- LANL is Different from Livermore or Brookhaven or EM sites
- 100% protection at many

What WE can do....

- Advocate for strong programs
- Seek and promote Best Management Practices
- Exchange information
- Technical positions
- Clarify what is “effective safety”

What does your gut say about level of safety?

Requirements

SITUATIONAL AWARENESS

Are our Fall Protection Programs Effective

- Care to take a survey

Work Planning

- In DESIGN
- Safety Program for Fall Protection
- Work Planning and Control
- Line leadership
- Worker engagement-commitment
- Contractors-subcontractors

Standards

- DOE contract language for ISMS
- 1910
 - Guardrails
- 1926 [construction ≠ maintenance]
 - Warning+monitor for LEADING edge
- ANS/ASMW 359.xx series

DOE/NNSA Contracts

- 970.5204-2 3???? ISMS
 - Better than OSHA minimums
 - Analyzed safety
- Laws Clause= Federal Regulations
 - 851 Worker Safety and Health Programs
- 970.5223-1 *Integration...*
- M&O responsible
 - flowdown

OSHA 1910

- Equal or greater protection
- 1910.23 ladderway-guarded
- 1910.23(b) Protection for wall opening and holes
- 1910.23(b)(1) every opening...drop >4 ft
“SHALL” be guarded
- 1910.23(c)) Protect open-sided floor, platforms, runways

Proposed 1910

- Additions/changes to 1910 for fall protection
- ~1990 not made into law
- 2010 not signed into law
- No expectation for legislative approval
- Subpart D Walking and Working
- Subpart I PPE-equipment
- Provides for warning lines and monitor
- Distance from edge allows interpretation?

OSHA 1926

- Need supervisors to understand what is and is not construction
- Leading edge work
- Inspection exception
- When leading edge become unprotected edge

ANSI/ASME 359

- DOE Policy for maximum use of consensus standards
- DDO= follow most conservative in providing safety
- Allows administrative controls for some hazards
- Question conservatism

Distances

- Stumble on level surface can take 2+
- Is 6 feet enough
- Workers erecting warning lines for *designated work* area at 6 feet at risk
- Is there any time a worker can be exposed to falls under 1910? *No per .23*
- *iProposed rule is silent on distance*

Training

- Fall protection training costs-extended
- Training for guardrails?
- Supervisor actions
- Training methods
 - Online only
 - Hands on
 - Classroom
- Safety Officer roles?
 - Work Planning and control?
 - Oversight vs supervisor vs foreman?

Cost

- Permanent vs temporary vs removable
- Portable guardrail
- Portable guardrail left in place
- Initial construction
- Warning lines
- 'Bout 400K for big building cheaper than setup/take down temp warning lines

What should we decide?

Do we have a situation the should be managed to reduce risk?

Should DOE allow using Proposed rule

Expectations related to picking from three regs instead of one for the situation.

What are your thoughts??????

From discussions

1. Wide range of contractors using different WSHP and Different fall protection programs derived from various regulations and consensus standards
2. Need focused communications with Feds, M&Os, unions and all tiers of subcontractors
3. Guide fall protection changes using techniques of culture change as well as written directions
4. Corporate leadership must support—expectations, accountability, learning and oversight
5. Leadership direction and learning needed for the mid-level supervisors and managers. OSHA has Supervisor definition that must be abided.

6. Concept for reviewing task and longer-term processes documents for fall protection. One site reviews leading Edge Plans, [processes for developing leading edge plans, and could consider process for reviewing construction safety documents. Which?
7. Major need for including Fall Protection in DESIGN phase-regardless of engineer and contracting office pushback
8. REAL training/learning –why, how, who, relationship to safety
9. Full coordination with COR, Technical, COs, etc from the beginning.
10. Contract mods expected or possible.

11. Clarify expectations when subs use M&O WSHP and FP plans.
12. How to put teeth into contract—How to put clarity into contract so teeth are less needed
13. Design FP into new construction and major mods,
14. Design / install guardrails for existing construction (prioritize using risk methods)
15. Develop engineered fall protection technical specifications (Div?? or safety and health)
16. Design engineered parapets, guardrails as 1st priority safety per ISMS and FP implementation hierarchy

17. Contractor onboarding topics, methods, communications
18. Contents of fall protection sections of WSHP, HASP, FP work plans
19. Consider contract requirement (standard?) requiring work of X magnitude or XX # workers to have an onsite safety person (in sense of OSHA supervisor, qualified, or just because it makes sense)
20. Are 10 CFR 851 guide, FP standard, Construction Safety and Health Program (Std-1149) adequate? Is guidance thorough enough?